Release notes for ENDF/B Development e-034_Se_000 evaluation

October 13, 2016

- `fudge-4.0` Warnings:

    1. Mislabled emitted particle
       Reading ENDF file: ../e-034_Se_000.endf (Error # 0): ZAP messed up

       `WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0`

    2. FIXME: Generic fudge unimplemented message
       reaction label 1: e- + Se + gamma [bremsstrahlung] / Product: e- (Error # 0): Generic unimp (c)

       `WARNING: Checking not yet implemented for energyLoss type data`

    3. FIXME: Generic fudge unimplemented message
       reaction label 2: e- + Se [excitation] / Product: e- (Error # 0): Generic unimp (c)

       `WARNING: Checking not yet implemented for energyLoss type data`

- `fudge-4.0` Errors:

    1. Calculated and tabulated thresholds don't agree
       reaction label 0: e- + Se [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    2. Calculated and tabulated thresholds don't agree
       reaction label 1: e- + Se + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    3. Calculated and tabulated thresholds don't agree
       reaction label 2: e- + Se [excitation] / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!`

    4. Calculated and tabulated thresholds don't agree
       reaction label 3: e- + e- + Se1s1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 12619. eV!`

    5. Calculated and tabulated thresholds don't agree
       reaction label 4: e- + e- + Se2s1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1641.5 eV!`

    6. Calculated and tabulated thresholds don't agree
       reaction label 5: e- + e- + Se2p1/2 / Cross section: (Error # 0): Threshold mismatch

       `WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1481.2 eV!`

    7. Calculated and tabulated thresholds don't agree
       reaction label 6: e- + e- + Se2p3/2 / Cross section: (Error # 0): Threshold mismatch

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```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 1438.6 eV!
```

8. Calculated and tabulated thresholds don't agree
   reaction label 7: e- + e- + Se3s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 226.1 eV!
```

9. Calculated and tabulated thresholds don't agree
   reaction label 8: e- + e- + Se3p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 169.77 eV!
```

10. Calculated and tabulated thresholds don't agree
    reaction label 9: e- + e- + Se3p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 163.71 eV!
```

11. Calculated and tabulated thresholds don't agree
    reaction label 10: e- + e- + Se3d3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 64.91 eV!
```

12. Calculated and tabulated thresholds don't agree
    reaction label 11: e- + e- + Se3d5/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 63.97 eV!
```

13. Calculated and tabulated thresholds don't agree
    reaction label 12: e- + e- + Se4s1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 20.99 eV!
```

14. Calculated and tabulated thresholds don't agree
    reaction label 13: e- + e- + Se4p1/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9.82 eV!
```

15. Calculated and tabulated thresholds don't agree
    reaction label 14: e- + e- + Se4p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 9.4 eV!
```

- `xsectplotter` Warnings:

  1. Mislabled emitted particle
     Error: ZAP messed up

     ```
     stderr while processing crossSection

         WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0
     ... [2 more lines]
     ```